

WHAT IS CLAIMED IS:

1. A structural carrier assembly for a motor vehicle front or rear end, comprising:
 - at least one support bracket adapted for connection to at least one frame rail extending from a motor vehicle body;
 - a unitary carrier member adapted for connection to the at least one support bracket, the at least one support bracket adapted to support the carrier member on the at least one frame rail; and
 - at least one attachment clip provided on one of the carrier member and the at least one support bracket and adapted to engage the other of the carrier member and the at least one support bracket to secure the connection therebetween.
2. The structural carrier assembly of Claim 1, wherein the carrier member and the at least one support bracket are formed of metal.
3. The structural carrier assembly of Claim 1, wherein the carrier member and the at least one support bracket are formed of molded plastic material.
4. The structural carrier assembly of Claim 1, wherein the carrier member and the at least one support bracket are formed of different materials.
5. The structural carrier assembly of Claim 1, further comprising a cross frame mounted to an upper end of the carrier member by removable mechanical attachments.
6. The structural carrier assembly of Claim 1, further comprising a cross frame mounted to an upper end of the carrier member by permanent welds.

7. The structural carrier assembly of Claim 1, wherein the at least one attachment clip comprises an integral fulcrum cup and locking tab provided on the carrier member, the locking tab adapted to engage a mating opening formed in the at least one support bracket to connect the carrier member to the at least one support bracket.

8. The structural carrier assembly of Claim 7, wherein the locking tab is shaped to engage a polygonal-shaped mating opening in the at least one support bracket.

9. The structural carrier assembly of Claim 7, wherein the fulcrum cup is adapted to receive at least a portion of the at least one support bracket when the at least one attachment clip connects the carrier member to the at least one support bracket.

10. The structural carrier assembly of Claim 7, wherein the fulcrum cup is substantially semicircular shaped.

11. The structural carrier assembly of Claim 1, wherein the carrier member further comprises at least one integrally formed attachment mount adapted to support at least one accessory of a motor vehicle.

12. A structural carrier assembly for a motor vehicle front end, comprising:

at least one support bracket adapted for connection to at least one front frame rail extending forward from a motor vehicle body; and

a unitary carrier member having at least one attachment clip adapted for engagement with the at least one support bracket to secure a connection between the carrier member and the at least one support

bracket, the at least one support bracket adapted to support the carrier member on the at least one front frame rail.

13. The structural carrier assembly of Claim 12, wherein the
5 carrier member and the at least one support bracket are formed of metal.

14. The structural carrier assembly of Claim 12, wherein the
carrier member and the at least one support bracket are formed of molded
plastic material.
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15. The structural carrier assembly of Claim 12, wherein the
carrier member and the at least one support bracket are formed of
different materials.

16. The structural carrier assembly of Claim 12, further
15 comprising a cross frame mounted to an upper end of the carrier member
by removable mechanical attachments.

17. The structural carrier assembly of Claim 12, further
20 comprising a cross frame mounted to an upper end of the carrier member
by welds.

18. The structural carrier assembly of Claim 12, wherein the at
least one attachment clip comprises an integral fulcrum cup and locking
25 tab provided on the carrier member, the locking tab adapted to engage a
mating opening formed in the at least one support bracket to connect the
carrier member to the at least one support bracket.

19. The structural carrier assembly of Claim 18, wherein the
30 locking tab is shaped to engage a polygonal-shaped mating opening in the
at least one support bracket.

20. The structural carrier assembly of Claim 18, wherein the fulcrum cup is adapted to receive at least a portion of the at least one support bracket when the at least one attachment clip connects the carrier member to the at least one support bracket.

21. The structural carrier assembly of Claim 18, wherein the fulcrum cup is substantially semicircular shaped.

22. The structural carrier of Claim 12, wherein the carrier member further comprises at least one integrally formed attachment mount adapted to support at least one accessory of the motor vehicle.

23. A method of installing a structural carrier assembly in a motor vehicle front or rear end, comprising:
attaching at least one support bracket to at least one frame rail extending from a motor vehicle body;
positioning a unitary carrier member on the at least one support bracket; and
rotating the carrier member relative to the at least one frame rail such that at least one attachment clip provided on one of the carrier members and the at least one support bracket engages the other of the carrier members and the at least one support bracket, and secures a connection between the carrier member and the at least one support bracket.

24. The method of Claim 23, further comprising mounting a cross frame to an upper end of the carrier member by one of removable mechanical attachments and permanent welds.

25. The method of Claim 23, wherein the at least one attachment clip comprises an integral fulcrum cup and locking tab provided on one of the carrier member and the at least one support bracket, the locking tab engaging a mating opening formed in the other of the carrier member and the at least one support bracket when the carrier member is rotated, and secures a connection between the carrier member and the at least one support bracket.

26. The method of Claim 25, wherein the locking tab is shaped to engage a polygonal-shaped mating opening.

27. The method of Claim 25, wherein the fulcrum cup aligns the carrier member on the at least one support bracket when the carrier member is rotated, such that the locking tab automatically engages the mating opening.

28. The method of Claim 23, wherein the at least one attachment clip comprises an integral fulcrum cup and locking tab provided on the carrier member, the locking tab engaging a mating opening formed in the at least one support bracket when the carrier member is rotated, and secures a connection between the carrier member and the at least one support bracket.

29. The method of Claim 28, wherein the locking tab is shaped to engage a polygonal-shaped mating opening in the at least one support bracket.

30. The method of Claim 28, wherein the fulcrum cup aligns the carrier member on the at least one support bracket when the carrier member is rotated, such that the locking tab automatically engages the mating opening.

31. The method of Claim 28, wherein the fulcrum cup receives at least a portion of the at least one support bracket when the at least one attachment clip connects the carrier member to the at least one support
5 bracket.

32. The method of Claim 23, further comprising applying an adhesive to the at least one attachment clip prior to the at least one attachment clip securing the connection between the carrier member and
10 the at least one support bracket.